

CLAIM AMENDMENTS

1. (Cancelled).
2. (Twice Amended) The separator as claimed in Claim ~~19~~ 29 wherein there are a plurality of tubes and a magnetic shuttle in each tube.
3. (Previously Presented) The separator as claimed in claim 2 wherein the tubes are arranged in a general circular array.
4. (Previously Presented) The separator as claimed in claim 3 wherein the tubes are disposed in a generally annular chamber.
5. (Previously Presented) The separator as claimed in claim 4 further comprising an annular baffle plate encircling the tubes at a location between the positions.
6. (Previously Presented) The separator as claimed in claimed in claim 5 wherein an edge of the baffle plate is profiled to allow fluid flow between the positions.
- 7-8. (Cancelled)
9. (Twice Amended) The separator as claimed in Claim ~~19~~ 29 further including a baffle encircling the tube or tubes at a location between the positions.
- 10-14. (Cancelled)
15. (Twice Amended) The separator according to claim ~~19~~ 29, wherein the or each magnetic shuttle includes linear array of magnets and seals at either end of the array for sealing with an inner face of the tube.

16. (Currently Amended) The separator according to claim ~~19~~ 29, further including control apparatus for supplying compressed air to the tube to move the shuttle,~~or shuttles~~, between its positions.

17. (Cancelled)

18. (Twice Amended) The separator according to claim ~~19~~ 29, wherein the tube,~~or tubes~~, is disposed in a chamber divided by a baffle plate through which the tube[[s]] extends and the release position lies upstream of the baffle, whilst the separator position lies downstream of the baffle.

19.-28. (Cancelled)

29. (Previously Presented) A magnetic separator for separating magnetic material from a fluid flow flowing in a flow path including  
one tube portion disposable in the flow path and  
a magnet within the tube portion movable between a separator position  
in the tube portion and a release position in which the magnet is withdrawn from  
the tube portion

characterised in that the magnet is in the form of a shuttle and in that  
the tube portion is part of a longer tube disposable within the flow path  
whereby the magnet moves between its positions by differential  
pressure being created across the magnet, and further including an outlet valve for  
directing the fluid in a first direction when the shuttle is in its separator position and  
in a second direction when the shuttle is not in its separator position.

30. (Cancelled)

31. (Previously Presented) A magnetic separator for separating magnetic material from fluid flowing in a flow path comprising:

a plurality of tube portions disposable in the flow path, each tube portion being part of a larger tube disposable within the flow path;

a magnetic shuttle in each tube portion, the shuttles being movable between a separator position in the tube portion and a release position in which the magnetic shuttle is withdrawn from the tube portion; and

an outlet valve for directing the fluid in a first direction when the shuttle is in its separator position and in a second direction when the shuttle is not in its separator position,

whereby each shuttle moves between its positions by differential pressure being created across the shuttle, the tubes being arranged in an array whereby the forces between the magnets are balanced.

32. (Previously Presented) A magnetic separator for separating magnetic material from fluid flowing in a flow path comprising:

a plurality of tube portions disposable in the flow path, each tube portion being part of a larger tube disposable adjacent the flow path;

a magnetic shuttle in each tube portion, the shuttles being movable between a separator position in the tube portion and a release position in which the magnetic shuttle is withdrawn from the tube portion; and

an outlet valve for directing the fluid in a first direction when the magnetic shuttle is in its separator position and in a second direction when the shuttle is not in its separator position,

whereby each shuttle moves between its positions by differential pressure being created across the shuttle, the tubes being arranged in a circular array whereby the forces between the magnets are balanced.

33. (New Claim) The separator as claimed in claim 31 wherein the tubes are arranged in a general circular array.

34. (New Claim) The separator as claimed in claim 31 wherein the tubes are disposed in a generally annular chamber.

35. (New Claim) The separator as claimed in claim 31 further comprising an annular baffle plate encircling the tubes at a location between the positions.

36. (New Claim) The separator as claimed in claim 31 wherein an edge of the baffle plate is profiled to allow fluid flow between the positions.

37. (New Claim) The separator as claimed in Claim 31 further including a baffle encircling the tube or tubes at a location between the positions.

38. (New Claim) The separator according to claim 31 wherein at least one magnetic shuttle includes linear array of magnets and seals at either end of the array for sealing with an inner face of the tube.

39. (New Claim) The separator according to claim 31, further including control apparatus for supplying compressed air to the tube to move the shuttle, or shuttles, between its positions.

40. (New Claim) The separator according to claim 31, wherein the tubes are disposed in a chamber divided by a baffle plate through which the tubes extend and the release position lies upstream of the baffle, whilst the separator position lies downstream of the baffle.

41. (New Claim) The separator as claimed in claim 32 wherein the tubes are disposed in a generally annular chamber.

42. (New Claim) The separator as claimed in claim 32 further comprising an annular baffle plate encircling the tubes at a location between the positions.

43. (New Claim) The separator as claimed in claim 32 wherein an edge of the baffle plate is profiled to allow fluid flow between the positions.

44. (New Claim) The separator as claimed in claim 32 further including a baffle encircling the tube or tubes at a location between the positions.

45. (New Claim) The separator according to claim 32 wherein at least one magnetic shuttle includes linear array of magnets and seals at either end of the array for sealing with an inner face of the tube.

46. (New Claim) The separator according to claim 32, further including control apparatus for supplying compressed air to the tube to move the shuttle, or shuttles, between its positions.

47. (New Claim) The separator according to claim 32, wherein the tubes are disposed in a chamber divided by a baffle plate through which the tubes extend and the release position lies upstream of the baffle, whilst the separator position lies downstream of the baffle.